

AMENDMENT UNDER 37 CFR § 1.111
Serial No. 09/501,517

REMARKS

Reconsideration of this application is requested.

A total of 45 claims remain in the present application. Referring now to the text of the Office Action:

- a) claim 1 stands rejected under 35 U.S.C. § 102(e), as being unpatentable over the teaching of United States Patent No. 5,173,898 (Heinzmann et al.);
- b) 3-9 stand rejected under 35 U.S.C. § 103(a), as being unpatentable over the teaching of United States Patent No. 5,173,898 (Heinzmann et al.);
- c) claims 10-20 are objected to as being dependent upon a rejected base claim; and
- d) claims 21-45 are allowed.

Applicant appreciates the Examiner's indication of allowable subject matter in respect of original claims 10-20, and allowance of original claims 21-45. The Examiner's rejection of claim 1 under 35 U.S.C. § 102(e) and claims 2-9 under 35 U.S.C. § 103(a), is respectfully traversed in view of the following comments.

At paragraph 3 of the detailed action, the Examiner asserts that: "Heinzmann teaches (figure 2) a method of routing variable-length packet data across a communications network ... comprising: inverse multiplexing a data packet into a frame comprising: a label block containing label information of the frame; and two or more respective payload blocks having a predetermined length; transmitting the label block over a label channel of the network; and transmitting each payload block over respective separate data channels of the network".

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This characterization is not supported by the teaching of Heinzmann et al. and cannot be sustained in law.

United States Patent No. 5,173,898 (Heinzmann et al.) teaches a method of multiple access control in a cyclic reservation multiple access communications system.

"The system comprises an A-bus (11) and a B-bus (13) which serve as transmission medium for the one and the other direction. Two headend functions, HEAD-A (15) and HEAD-B (17) are provided. A plurality of node stations (19-1 . . . 19-N) are attached to both busses. Each headend issues fixed-length time slots on its associated bus for use by the nodes. The time slots are organized in sequential cycles (of variable length) as indicated in FIG. 1. Every cycle is explicitly numbered modulo some maximum number.

To regulate access to the transmission medium, i.e. usage of the time slots for data transmission, an order pad passing procedure is used (as described in the above-mentioned European patent application)." (Col 3, lines 5-18)

As shown in FIG. 2, the variable length packets (frames) can be conveyed through the network by reserving a desired number of consecutive time slots, and dividing the frame into segments equal in length to each reserved time slot. Thus:

In FIG. 2 there is shown the principle for segmenting data frames prior to transmission so that they can be accommodated in the fixed-length time slots propagating on the bus. Each frame . . . is simply cut into equal-size segments (payloads) which fit into the fixed-length data segment fields of the time slots. (Col 3, lines 57 -65, underlining added)

Based on the foregoing, Heinzmann et al. clearly and unambiguously teach that a variable length packet is "cut into equal-size segments" blindly; that is, without regard to either the frame format or the resulting content of each segment.

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Furthermore, Heinzmann et al state that:

A segment header ... is added to each segment payload for identifying the type of segment payload (e.g. FDDI, 802.2, HPPI data, or begin/middle/end/single segment of a frame) and inserted together with the segment payload into a passing free time slot. (Col 3, line 65 – Col 4, line 25, underlining added)

The skilled artisan will immediately appreciate that, while the system of Heinzmann et al. is aware of the type of payload within a segment, this information is not used to control which slot the segment is inserted into. Instead, each segment is blindly inserted "into a passing free time slot". As such, Heinzmann et al do not teach or suggest a division of time slots between label (or header) data and payload data of the frame. More particularly, Heinzmann et al do not teach or suggest any equivalent to the "label channel" of the present invention.

It may be noted that, according to Heinzmann et al, "each time slot, besides a segment payload and associated header (together representing a data channel), also includes a section for commands or signaling information (representing a signaling channel), and of course a slot delimiter." (See col 4, lines 12-16). However, since a variable length frame is blindly cut into segments, and each segment blindly inserted into a slot, there is obviously no relationship between the content of the signaling channel and the header (label) data of the frame. As such, it will be seen that there is no similarity whatsoever between the data and signaling channels of Heinzmann et al, and the label and data channels of the present invention.

As detailed above, the person of ordinary skill in the art will immediately recognize that Heinzmann et al clearly and unambiguously contradict the Examiner's characterization. In particular:

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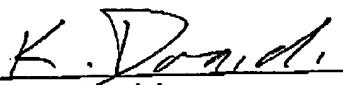
- o Heinzmann et al do not teach, suggest, or even remotely contemplate that a data packet is inverse multiplexed "into a frame comprising: a label block containing label information of the frame; and two or more respective payload blocks having a predetermined length", as alleged by the Examiner. Instead, a variable length frame is blindly cut into fixed length segments, without regard to the content of each segment.
- o Heinzmann et al do not teach, suggest, or even remotely contemplate "transmitting the label block over a label channel of the network, and transmitting each payload block over respective separate data channels of the network", as alleged by the Examiner. Rather, Heinzmann et al explicitly teach that each segment is blindly inserted into a passing free time slot, again without regard to its content.

Accordingly, it is respectfully submitted that United States Patent No. 5,173,898 (Heinzmann et al.) does not teach or suggest any of the elements of claim 1, and as such, cannot support a rejection under either 35 U.S.C. § 102(e) or 103(a). None of the other known prior art references, taken alone or in any combination, supplies the missing subject matter. In light of the foregoing, it is respectfully submitted that the presently claimed invention is clearly distinguishable over the prior art of record, and is patentable. Claims 2-9 depend directly or indirectly from patentable claim 1, and thus are believed to also be patentable. Thus it is believed that the present application is in condition for allowance, and early action in that respect is courteously solicited.

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If any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this response, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 19-5113.

Respectfully submitted,


By: Kent Daniels
Reg. No. 44,206
Attorney for the Applicants

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Ogilvy Renault
Suite 1600
1981 McGill College Avenue
Montreal, Quebec
Canada, H3A 2Y3
(613) 780 8673